FIG.1

```
                        ┌─────────────────┐
                        │ user information│─100
                        └─────────────────┘
                                 │
        ┌────────────┐  ┌─────────────────┐     ┌──────────────────────┐
   101──│user history│  │                 │─────│automatic update flag │─101a
        └────────────┘  └─────────────────┘     └──────────────────────┘
                 │
     ┌──────────────────┐              ┌──────────────────┐
     │   consumption    │─102          │   consumption    │─103
     │   type data      │              │  behavior data   │
     └──────────────────┘              └──────────────────┘
              │                                 │
     ┌──────────────────┐              ┌──────────────────┐
     │   simple view    │─104          │  normal finish   │─110
     │   data           │              │  data            │
     ├──────────────────┤              ├──────────────────┤
     │   recording      │─105          │  skimmed data    │─111
     │   data           │              ├──────────────────┤
     ├──────────────────┤              │  skipped data    │─112
     │   backup data    │─106          ├──────────────────┤
     ├──────────────────┤              │   replay data    │─113
     │  transfer data   │─107          ├──────────────────┤
     ├──────────────────┤              │  slowed play     │─114
     │   program        │─108          │  data            │
     │   identifier     │              ├──────────────────┤
     ├──────────────────┤              │  stopped data    │─115
     │ data protection  │─109          ├──────────────────┤
     │ flag             │              │   program        │─116
     └──────────────────┘              │   identifier     │
                                       ├──────────────────┤
                                       │ data protection  │─117
                                       │ flag             │
                                       └──────────────────┘
```
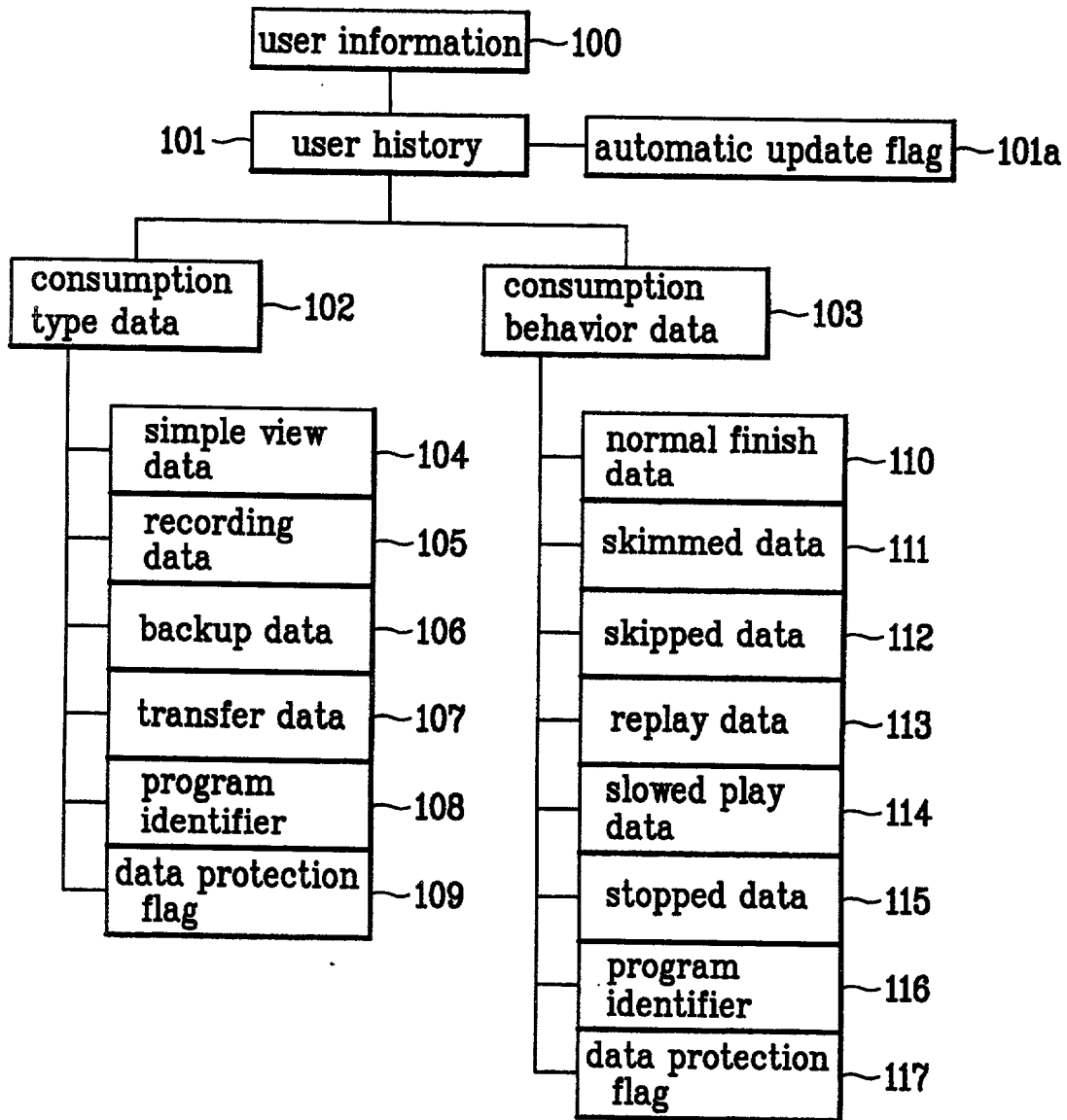
FIG.2

simple view data=(end time) or (start time)
recording data=(recording time, recording format)
backup data=(backup time, storage format)
transfer data=(transfer time, transfer format)

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normal finish data=(0 or 1)
skimmed data=(start of section, end of section) or (start of
                     section, length of section)
skipped data=(start of section, end of section) or (start of
                     section, length of section)
replay data=(start of section, end of section) or (start of
                     section, length of section)
slowed play data=(start of section, end of section) or (start of
                     section, length of section)
stopped data=(stop position identifier)

FIG.3

```
<complexType name="RecordOrTransferHistory">
        <element name="ActionTime" type="mds: TimePoint"
                minOccurs="0"/>
        <element name="ActionFormat" type="mds: MediaFormat"
                minOccurs="0"/>

</complexType>

<complexType name="ConsumptionType>
        <element name="SimplyPlayed" type="mds: TimePoint"
                minOccurence="0"maxOccurence="unbounded"/>
        <element name="Recorded" type="mds: RecordOrTransferHistory"
                minOccurence="0"maxOccurence="unbounded"/>
        <element name="Backedup" type="mds: RecordOrTransferHistory"
                minOccurence="0"maxOccurence="unbounded"/>
        <element name="Transferred" type="mds: RecordOrTransferHistory"
                minOccurence="0"maxOccurence="unbounded"/>
        <element name="ReferenceToProgram" type="mds: ReferenceToProgram"
                minOccurs="1"/>
        <attribute name="protection" type="Boolean" use="default"
                value="true"/>
</complexType>

<complexType name="ConsumptionBehavior>
        <element name="NormalFinish" type="xml: boolean" minOccurs="0"/>
        <element name="Skimmed" type="mds: MediTime"
                minOccurs="0"maxOccurs="unbounded"/>
        <element name="Skipped" type="mds: MediaTime"
                minOccurs="0"maxOccurs="unbounded"/>
        <element name="slowed" type="mds: MediaTime"
                minOccurs="0"maxOccurs="unbounded"/>
        <element name="Replayed" type="mds: MediaTime"
                minOccurs="0"maxOccurs="unbounded"/>
        <element name="Stopped" type="mds: MediaTimePoint"
                minOccurs="0"/>
        <element name="ReferenceToProgram" type="mds: ReferenceToProgram"
                minOccurs="1"/>
        <attribute name="protection" type="Boolean" use="default"
                value="true"/>
</complexType>

<complexType name="UsageHistory">
        <element name="ConsumptionType" type="mds: ConsumptionType"
                minOccurs="0"maxOccurs="unbounded"/>
        <element name="ConsumptionBehavior" type="mds: ConsumptionBehavior"
                minOccurs="0"maxOccurs="unbounded"/>
        <attribute name="allowAutomaticUpdate" type="boolean"
                use="default" value="true"/>

</complexType>
```

FIG.4

consumption type data ~401

permitted consumption type ~407

simple view data ~402

recording data ~403

backup data ~404

transfer data ~405

program identifier ~406

permitted number of simple view ~408

permitted number /type of recording ~409

permitted number /type of backup ~410

permitted number /type of transfer ~411

program identifier ~412

program consumption control unit ~400

program consumption permission flag